MS4 Program Audit Report
City of Hopewell, Virginia
Permit #VAR040015
March 14, 2016

INTRODUCTION

The City of Hopewell (hereafter referred to as "the City") is located approximately 24 miles southeast of Richmond along Interstate 295 and the Appomattox River. The municipality encompasses approximately 11 square miles[1], with a population of 22,591 as of the 2010 U.S. Census[2]. The MS4 discharges through approximately 135 existing outfalls according to the September 2015 Illicit Discharge Detection and Elimination Manual into the Appomattox and James Rivers, which eventually flow into the Chesapeake Bay. There are two points of interconnection between the City of Hopewell MS4 and the Virginia Department of Transportation (VDOT) and Fort Lee MS4s. The City's MS4 Program is coordinated through the Department of Public Works.

On January 28th and 29th, 2016, DEQ staff along with two consultants from Eastern Research Group, Inc. (ERG), (collectively referred to as the DEQ Inspection Team) conducted an audit of the City's MS4 Program. The purpose of the audit was to assess the City's compliance with the Phase II MS4 General Permit (hereafter referred to as "the permit"), the MS4 program developed and implemented to meet the requirements of that permit, and its effectiveness. Listed below are the names/titles of the representatives involved with all or part of the audit.

City of Hopewell
- Mr. Joseph Battiata, Stormwater Program Manager
- Ms. Michele Corneau, Grounds Maintenance Supervisor/Erosion and Sediment Control Inspector
- Mr. Benjamin Leach, Stormwater Systems Management Engineer

3E Consulting (Consultant Firm for City of Hopewell)
- Ms. Kay Cabe, Senior Environmental Engineer
- Mr. Lee Hixon, Senior Environmental Engineer
- Mr. Paul Leeger, Environmental Scientist/Engineer
- Mr. Chris Schrinel, Environmental Engineer

Virginia DEQ
- Ms. Emilee Adamson, Planning & Water Permitting Manager, Piedmont Regional Office
- Mr. David Aho, Stormwater Compliance, Piedmont Regional Office
- Mr. Joseph Bryan, VPDES Water Permit Writer, Piedmont Regional Office
- Mr. Mason Harper, MS4 Compliance Coordinator, Central Office

Eastern Research Group, Inc. (Consultant Firm for Virginia DEQ)
- Mr. Cassidy Owen, Engineer
- Ms. Lauren Scott, Engineer

Dry weather conditions were experienced throughout the inspection activities. Weather history reports for nearby Richmond indicate that 0.87 inches of precipitation and 5.4 inches of snow was received on January 23, 2016.[3]

MS4 PROGRAM OVERVIEW/AUDIT FINDINGS

Findings from the audit are summarized in the sections below that describe the permittee's existing MS4 Program Plan and implementation of that plan at the time of the audit. Report sections correspond to

[1] http://www.hopewellva.gov/location/
[2] http://quickfacts.census.gov/qfd/states/51/51670.html
[3] NOAA Weather Service Forecast Office. http://w2.weather.gov/climate/index.php?wfo=akq

each of the major MS4 program areas or Minimum Control Measures (MCMs). Each section describes observations associated with the permit and/or the MS4 Program Plan and its implementation. Recommendations to strengthen the program and corrective actions to comply with the permit are provided at the end of the report.

Overall MS4 Program Management

The City's MS4 Program is coordinated through the Department of Public Works. Mr. Benjamin Leach explained the roles and responsibilities of city staff and consultants in implementing the program. The City's MS4 Program Plan and 2015 Annual Report are combined into a single document dated October 1, 2015.

The permit requires that the MS4 Program Plan be updated with the following by July 1, 2014 (12 months after permit coverage):

- Public Education Outreach Plan;
- Written illicit discharge procedures;
- Written procedures for the inspection and management of privately-owned Stormwater Management Facilities;
- Written procedures for the inspection of operator-owned Stormwater Management Facilities;
- Identification of locations requiring Stormwater Pollution Prevention Plans (SWPPPs);
- Locations requiring Nutrient Management Plans (NMPs); and
- Training program and schedule for pollution prevention/good housekeeping.

The City's 2014 Annual Report (submitted October 1, 2014) includes the above documentation with the exception of written procedures for the inspection of privately-owned stormwater management facilities. The City's October 1, 2015, MS4 Program Plan includes all of the above documentation.

The permit requires that the MS4 Program Plan be updated with the following by July 1, 2015 (24 months after permit coverage):

- Updated Total Maximum Daily Load (TMDL) Action Plans;
- Development of a Chesapeake Bay TMDL Action Plan;
- Written compliance and enforcement procedures for construction site stormwater runoff control; and
- Written good housekeeping procedures for daily municipal operations, such as street and equipment maintenance.

The City's October 1, 2015, MS4 Program Plan includes the above documentation.

The City of Hopewell's MS4 program is supported by a stormwater enterprise fund that became effective July 1, 2015, and currently brings in $4 per equivalent residential unit (ERU) per month. The City defines one ERU as "2,100 square feet of impervious (hard) surfaces." The City estimates that when this new program is fully funded it will bring in $1.2 million per year for the MS4 program.

Public Education and Outreach on Stormwater Impacts, MCM #1

The permit requires permittees to develop a Public Education and Outreach Plan, and that the plan be designed to do the following:

- Identify three (3) high priority-water quality issues and a rationale for the selection of each issue;

- Identify and estimate the population size of the target audience who is most likely to have significant impact for each water quality issue; and
- Identify the relevant message(s) and associated educational and outreach materials for distribution to the target audiences.

The City's 2014 Annual Report states that "an education and outreach plan for the 2014-2015 reporting period was developed during this reporting cycle, thus no education and outreach activities occurred according to the updated plan." The City's 2014 Annual report lists the following three high-priority water quality issues:

1. Apartment rental properties waste management
2. Automotive repair shops' activities & waste management
3. Good housekeeping/pollution prevention practices

The City indicated that the purpose of listing good housekeeping and pollution prevention practices as a high-priority water quality issue for city staff was to hold bi-annual training for city staff (in addition to the annual training required by MCM #6). The City's 2015 Annual Report states that less than twenty percent of the target audience was reached via public education and outreach for two of the three high-priority water quality issues during permit year two and therefore two of the high-priority water quality issues were changed.

The City's 2015 Annual Report and standalone MS4 Public Education and Outreach Plan list the following three high-priority water quality issues:

1. Public education on stormwater impacts for the general public.
2. Education on special water quality concerns (E. coli) for the general public.
3. Good housekeeping/pollution prevention practices for city staff.

Public Involvement/Participation, MCM #2

The permit requires operators to participate in a minimum of four local activities that involve the public in either reducing stormwater pollutant loads, improving water quality, or supporting local restoration and/or clean-up projects. In the 2015 Annual Report, the City indicated participation in three local activities.

The permit requires that the updated MS4 Program Plan and Annual Report be posted on the operator's web page within 30 days of submittal to DEQ. The City has a single document labeled as the MS4 Program Plan and 2015 Annual Report located on their web page.

Illicit Discharge Detection and Elimination (IDDE), MCM #3

At the time of the audit, the City did not have a digitized storm sewer system map. The City uses a hard-copy storm sewer map from 1978 if piping needs to be tracked (i.e., follow-up on potential illicit discharges). The City's catch basins and outfall locations are digitally mapped in their GIS system. Storm sewer pipes are not digitally mapped. During the audit the City indicated that their 5-year budget plan includes digitizing and updating the existing storm sewer map.

3E Consulting, Inc (3E) currently performs all of the City's outfall screening using a GIS field application with the mapped location of all MS4 outfalls. City staff and 3E were unable to clarify whether a standard naming convention to inventory the outfalls exists. The Outfall Map dated January 20, 2016, does not list the six digit hydrologic HUC of all receiving waters. At the time of the inspection, the City did not have a prioritized outfall screening schedule as required by the permit. Rather, the City indicated that they inspect all outfalls each year. The City's 2015 Annual Report states that 97 outfalls were inspected during the reporting year. During the audit, the City indicated that they did not plan to continue inspecting all outfalls in future years. The Outfall Inventory Table in Appendix B of the City of Hopewell Illicit Discharge Detection and Elimination

Manual (dated September 2015) states that 96 outfalls were inspected on June 15, 2015, and an additional 39 outfalls were inspected on January 15, 2016. The City indicated that approximately 60 new outfalls were located in 2015 while performing screening on the 96 existing outfalls during permit year two.

The City's MS4 is interconnected with Fort Lee and VDOT MS4s. The City sent notifications to each downstream MS4 via email from Benjamin Leach on October 7, 2015.

The permit requires that the operator prohibit non-stormwater discharges into the MS4 through ordinance or other legal mechanism. The City's Stormwater Ordinance (dated July 15, 2014) prohibits illicit discharges.

The City's Illicit Discharge Detection and Elimination Program Manual (dated September 2015) states that outfall screening shall use the Outfall Reconnaissance Inspection Form from the manual. At the time of the inspection, the City was unable to provide the Outfall Reconnaissance Inspection Forms. The City did not use the Outfall Reconnaissance Inspection Forms during outfall screenings conducted during the inspection. 3E documents outfall inspections via an online GIS platform. The online GIS database displays the most recent set of outfall inspection observations (i.e., previous inspection observations spanning multiple years for an outfall are not visible). It is unclear how the City stores and retrieves as needed historical observations of outfall screening activities. The GIS platform includes ten outfall inspection user observation sections that have slightly different content than the seven sections listed in the Outfall Reconnaissance Inspection Form.

The City's illicit discharge investigation and outfall screening procedures are detailed in the Illicit Discharge Detection and Elimination Program Manual. Section 4.5 of the City's Illicit Discharge Detection and Elimination Program Manual states that potential illicit discharges suspected of being sanitary sewage or significantly contaminated must be investigated within 5 business days; and illicit discharges suspected of being less hazardous to human health must be investigated within 10 business days. According to documentation provided during the audit, City staff (Ben Leach and Joe Battiata) observed a pool of liquid and an odor indicative of a pesticide or herbicide near a 60-inch concrete pipe on December 8, 2015. The documentation does not indicate that the City investigated the potential illicit discharge to determine the source. 3E took a water sample from the pool of liquid on December 9, 2015. The sample results received on December 16, 2015, had non-detect measurements for herbicides or pesticides. The City and incident documentation did not indicate if the liquid discharge had been cleaned up.

The DEQ Inspection Team visited Outfall 5-57 at the intersection of East Randolph Road and Winston Churchill Drive (see photographs 1 through 5 in Appendix 1). The DEQ Inspection Team made the following observations:

- Observations were made at a drop inlet next to Winston Churchill Drive, which is upstream of the true outfall but serves as the Outfall 5-57 location.
- The outfall drains to a tributary of Gravelly Run.
- Mr. Paul Leeger of 3E Consulting performed a field screening of Outfall 5-57 and recorded observations in an online GIS database.
- Flow was observed in the pipe and inspection observations were made from ground level, which was approximately 10-15 feet above the pipe. The flow was suspected to be associated with snow melt from the precipitation received in the week prior to the inspection. Temperatures ranged from 25 to 41 degrees Fahrenheit on January 28, 2016, and 24 to 47 degrees Fahrenheit on January 29, 2016.[3]

The DEQ Inspection Team visited Outfalls 6-27 and 6-28 located along a channeled portion of Cattail Creek (see photographs 6 through 8 in Appendix 1). The DEQ Inspection Team made the following observations:

- Outfalls 6-27 and 6-28 are the end points of reinforced concrete pipes that discharge into a Cattail Creek concrete channel.
- Flow was observed in both outfalls. The flow was suspected to be associated with snow melt from the precipitation received in the week prior to the inspection.

Construction Site Stormwater Runoff Control, MCM#4

The City of Hopewell is a Virginia Stormwater Management Program (VSMP) authority. On July 15, 2014, the City's Stormwater Ordinance became effective to support the City's enforcement of the VSMP. The City currently has two combined administrators for the erosion and sediment control program, Mr. Benjamin Leach and Ms. Michele Corneau, who are also both accredited stormwater inspectors. Ms. Corneau supports the MS4 program part time and performs the majority of the erosion and sediment control inspections for active construction sites. Mr. Joseph Battiata is the certified stormwater management plan reviewer for the City.

The City's Stormwater Management Ordinance 2015-03 does not specify an inspection schedule for land-disturbing activities. The 2015 Annual Report states that the City is subject to Chapter 14, Article II of the City Code (Erosion and Sediment Control). Section 14-5 of Article II requires periodic inspections in accordance with 4VAC50-30-60, which is no longer current and has been replaced with 9VAC25-840-60. Inspections must occur during or immediately following initial installation of erosion and sediment controls, at least once in every two-week period, within 48 hours following any runoff producing storm event, and at the completion of the project prior to the release of any performance bonds. Based on the total number of inspections per site listed in the 2015 Annual Report, sites were not inspected per the frequency required by 9VAC25-840-60.

The permit requires the City to include the following information in their annual report:

- Total number of regulated land-disturbing activities;
- Total number of acres disturbed;
- The total number of inspections conducted; and
- A summary of the enforcement actions taken.

The City's 2015 Annual Report did not include information on the land-disturbing activities that had agreements in lieu of plans. For the projects that were included in the 2015 Annual Report, the City provided the following information: the number of acres disturbed for each activity, the number of inspections for each activity, and a summary of enforcement actions for each activity. The 2015 Annual Report did not list the total number of activities, total number of acres disturbed, or the total number of inspections conducted.

The permit requires the City to promote a mechanism for receiving public complaints related to stormwater issues at construction sites. The City indicated that they use a system called "iWorks" for receipt of public complaints. They indicated, however, that this is mainly used for complaints related to private residences and that complaints about active construction sites are rarely received through this mechanism. The City's web page provides a Public Works telephone number and Mr. Leach's email for citizens to report complaints.

During the audit, Ms. Corneau indicated that she inspects active construction sites at least once every two weeks. She reviews site documentation and then walks around the facility recording observations on a paper inspection form while taking photographs. She discusses any observations with the construction contractor in person, if possible, immediately after her inspection. Items requiring corrective actions are given a completion date. Following the inspection, she creates a digital copy of the paper inspection form. Mr. Benjamin Leach reviews the inspection form. If Ms. Corneau identified any significant issues, Mr. Leach issues a notice to comply or stop-work order depending on the severity and longevity of the issue. Ms. Corneau performs a follow-up inspection to verify that items requiring corrective actions are addressed by the specified due date.

During the audit, the City provided newly developed construction inspection checklists and land disturbance applications and plan review checklists. The City indicated that these checklists had not been used yet, but would be used for all future land-disturbing projects.

The DEQ Inspection Team visited the Hopewell Regional Wastewater Treatment Plant construction project and shadowed Ms. Corneau on an inspection of the site (see photographs 74 through 110 in Appendix 1). The DEQ Inspection Team made the following observations:

- This is a functioning wastewater treatment plant with active construction in certain areas around the facility.
- Mr. Leach stated that the plant is located within the City of Hopewell but does not drain to the City's MS4. Mr. Leach stated that the site drains via surface runoff and to a combined sewer system.
- Land disturbance associated with the construction of a new ash facility was not currently being inspected. At the time of the inspection, the City was uncertain as to whether this land disturbance was covered under the same approved plan set as the rest of the site's construction.
- Inlet protection around grate drains was not installed per Virginia Erosion and Sediment Control specifications – there was no cross-bracing.
- Very silty water was discharging from temporary sediment basin 1 outfall, exiting the site, and flowing directly over the ground surface and into the James River.
- A rusted barrel was overturned on a hill between the location of the temporary sediment basin 1 outfall discharge and the James River.
- Silt fence and super silt fence were damaged and had fallen over in multiple areas.
- Sediment-laden runoff was ponded against a super silt fence and flowing into adjacent wetland areas at the far east end of the site. Temporary sediment basin 3 was previously in this location, but had been removed and was not present at the time of the inspection. The slope upstream of the former temporary sediment basin 3 site was not stabilized.
- A dewatering bag was actively leaking in the location of former temporary sediment basin 3.
- Temporary slope stabilization was not installed. Rilling was observed on construction embankments near temporary sediment basin 1 and former temporary sediment basin 3.

Following the DEQ audit, the City issued to the construction contractor a formal notice to comply on February 8, 2016, and required resolution of the observed issues no later than February 22, 2016.

The City provided copies of inspection reports and enforcement actions for the Hopewell Regional Wastewater Treatment Plant construction site from the three months prior to the DEQ audit. Based on the erosion and sediment control inspection reports, the Hopewell Regional Wastewater Treatment Plant construction project was inspected once every two weeks. The inspection reports indicate that erosion and sediment control practices were not satisfactorily installed per Virginia Erosion and Sediment Control specifications and approved plans. The inspection reports do not indicate that inspections occurred within 48 hours following a runoff-producing storm event.

Post Construction Stormwater Management in New Development and Re-Development, MCM#5

The City is an approved VSMP authority, see the discussion in MCM#4 for additional details. Construction site operators must have stormwater management plans approved by the City before any land disturbance may begin. The City provided a newly-developed Stormwater and Erosion and Sediment Requisites Package that is required at the beginning of the land-disturbance permitting and approval process. This process includes a review and approval of the stormwater plan prior to the beginning of the construction.

During the audit, the City provided newly developed construction inspection checklists and land disturbance applications and plan review checklists. The City indicated that these checklists had not been used yet, but would be used for all future land-disturbing projects.

Beginning in 2013, the City required all new stormwater management facilities to have a signed maintenance agreement. No new stormwater management facilities have been installed since 2013 and therefore the City does not have any maintenance agreements.

The permit requires that the City maintain an electronic database of stormwater management facilities, and that the database contain the following information:

- Type of stormwater management facility;
- Location of the facility;
- Acres treated by the facility (to include total acres and breakdown of pervious and impervious acres);
- Date the facility was brought online;
- Sixth order Hydrologic Unit Code (HUC) in which the facility is located;
- If the facility is operator-owned or privately-owned;
- Whether a maintenance agreement exists (for privately-owned facilities); and
- The date of the most recent inspection for the facility.

The City maintains a stormwater management facility tracking database that includes all known stormwater management facilities. The City's stormwater management facility tracking database includes all of the items required above, except for the sixth order HUC. The northings and eastings provided in the stormwater management facility tracking database do not appear to represent the stormwater management facility locations. The City stated that the 2014 stormwater management facility tracking database contained more stormwater management facilities than the database that was submitted with the 2015 Annual Report. The City performed a flyover and determined that some of the stormwater management facilities previously reported were not accurate. The City stated that GIS and field verification were used to compile the database that was submitted with the 2015 Annual Report.

During the audit, the City indicated that all City-owned stormwater management facilities are inspected annually and the inspection is recorded with an inspection form. The City provided a copy of the stormwater management facility tracking database that indicated all eight City-owned facilities were last inspected on September 30, 2015. There are some discrepancies between the database and the inspection forms. For example, stormwater management Facility 1-8 is listed in the database as a subsurface practice; however, the September 30, 2015, inspection form states it is bioretention. The stormwater management Facility 1-8 inspection form does not include an inspection date. The DEQ Inspection Team used satellite and street view imagery of the location of stormwater facility 1-8, which does not indicate that a bioretention is present.

According to the City's stormwater management facility tracking database, there are 21 privately-owned stormwater management facilities. At the time of the DEQ audit, the City stated that privately-owned stormwater management facilities had not been inspected.

The DEQ Inspection Team visited a publically-owned wet retention pond at Hopewell High School identified as Facility 1-7 in the stormwater management facility tracking database (see photographs 50 through 63 in Appendix 1). The DEQ Inspection Team made the following observations:

- Ms. Kay Cabe with 3E Consulting performed the inspection.

- Ms. Cabe used the standard inspection form to document the following types of issues: trash near the inflow pipe, vegetative overgrowth in the outflow channel, and the need to stabilize a portion of a slope near the inflow pipe.
- The facility ID number was not documented on the inspection form but based on the stormwater management facility database, this retention pond is Facility 1-7.
- Woody vegetation was observed within the facility.

The DEQ Inspection Team visited a privately-owned stormwater management facility located in the Westmoreland neighborhood identified as Facility 1-56 in the stormwater management facility tracking database (see photographs 64 through 73 in Appendix 1). The DEQ Inspection Team made the following observations:

- The City was initially unable to locate the specific stormwater management facility, although it was listed in the database as having been verified with GIS and field surveys.
- The stormwater management facility database identified the stormwater management facility as a stormwater detention pond.
- Ms. Cabe began to complete an inspection form for the area but was not asked to finish or provide the document following the inspection because the area was not a clearly defined stormwater management facility.

Following the audit, the City provided documentation that the visited site was supposed to have a stormwater management facility as per the 1984 plans for the neighborhood. However, the City was unable to locate evidence that any formal structure was ever installed. The City indicated that they have flagged this area to use for a future stormwater management facility location.

Pollution Prevention/Good Housekeeping, MCM#6

The City provided a list of 16 municipal facilities that discharge to the MS4 or surface water. The City identified the Public Works Facility and the Hopewell Landfill Site as high-priority facilities requiring a stormwater pollution prevention plan (SWPPP). At the time of the audit, the City had not yet developed a SWPPP for the Hopewell Landfill Site. The City stated that the landfill was closed and its discharges were covered under a separate industrial NPDES permit. During the audit, the City provided a draft SWPPP for the Public Works Facility that included a map and instructions for how to resolve issues at various locations. Operations at the Public Works Facility include fire department activities, salt and sand storage, minimal vehicle maintenance, vehicle washing, and vehicle/equipment storage (e.g., salt trucks, street sweeper, construction equipment).

The City's Good Housekeeping/Pollution Prevention Manual indicates that City staff receive annual training that includes defining and reporting potential illicit discharges, general maintenance and operational procedures, and proper waste management procedure. A Good Housekeeping/Pollution Prevention training sign-in sheet for a training held on June 26, 2015, was provided as Appendix F in the 2015 Annual Report.

The DEQ Inspection Team visited the Public Works Facility (see photographs 9 through 49 in Appendix 1). The DEQ Inspection Team made the following observations:

- Street sweeping debris was stored in an area at the top of a steep hill approximately 20 yards up gradient from Poythress Run. The debris pile had a temporary containment barrier consisting of silt fences. Portions of the silt fence between the debris pile and the waterway had collapsed.
- Fire department members stated that they sometimes wash vehicles with soap containing detergents in front of the fire department building where there is a nearby drop inlet that may tie into the storm sewer system.
- Oil staining was visible on the ground near the fueling area.

- The fueling area did not have a complete spill kit present.
- An unlabeled yellow barrel with an unknown liquid was stored outside near the Fire Drills Tower.
- Chemical cans, bags, and a metal barrel were located under the Facility Equipment and Materials Storage Building, which has an open front and many large holes in the roof.
- Salt and sand were present on the ground in front of the salt and sand storage building.
- A clogged storm drain was visible near the vehicle washing area.
- Uncovered propane tanks were located at the center of the facility.

During the audit, the City indicated that they do not conduct scheduled inspections of the Public Works Facility. The City stated that they were in the process of hiring a full-time inspector who would be responsible for regularly inspecting the Public Works Facility to ensure general good housekeeping practices were followed.

After the DEQ inspection, City staff stated that the drop inlet in front of the fire department building connected to a combined sewer. The DEQ inspection team reviewed a survey of the Public Works Facility that labels the drop inlet in front of the fire department building as connecting to a “6" St (PVC),” which ties into larger storm sewer pipes. The other storm sewer pipes on the survey are labeled with a “St” and are reinforced concrete pipe. The sanitary sewer pipes on the survey are labeled with an “S” and are PVC.

RECOMMENDATIONS

1. For MCM #1, consider revising the chosen high-priority water quality issues to focus on specific stormwater issues (e.g., types of illicit discharges, hazards of illicit discharges, proper waste disposal) – II.B.1.c(1).
2. For MCM #2, consider pursuing more traditional public involvement activities (e.g. stream cleanups, hazardous waste cleanup days, earth day events, etc.) – II.B.2.b.
3. For MCM #3, consider developing a storm sewer map that clearly delineates MS4 storm sewer lines versus combined sewer lines – II.B.3.a(1).
4. For MCM #3, ensure that inspection procedures account for difficult to access outfall locations (e.g., inspecting outfall from manholes at drop inlets) – II.B.3.c(1).
5. For MCM #3, consider creating a standard naming convention for the outfall inventory and revise outfall identifiers to follow the convention – II.B.3.a(2).
6. For MCM #3, consider revising Section 4.5 of the Hopewell IDDE Program Manual to investigate potential illicit discharges as soon as possible to the maximum extent practical – II.B.3.c(1)(d).
7. For MCM #3, consider revising the Hopewell IDDE Program Manual to accurately reflect how outfall screening inspections are documented using an online GIS tracking system – II.B.3.c.
8. For MCM #4, update the City’s ordinance and code during the next revision process to reference the most up-to-date Virginia regulations and specify the schedule for erosion and sediment control inspections – II.B.4.b and II.B.4.c.
9. For MCM #5, ensure that woody vegetation is removed from the Hopewell High School stormwater management facility – II.B.5.c(2).
10. For MCM #5, ensure that the inventory of public and private stormwater management facilities is accurate – II.B.5.e.
11. For MCM #6, consider performing scheduled inspections of municipal facilities, such as the Public Works Facility, to ensure that good housekeeping protocols are being implemented – II.B.6.b(4)(g).
12. For MCM #6, consider providing additional outreach and awareness training to all municipal staff whose job functions have the potential to impact stormwater (e.g., the Fire Department, school bus drivers) – II.B.6.d.
13. For MCM #6, ensure that the uncovered propane tanks in the Public Works Facility are empty – II.B.6.a.
14. For MCM #6, ensure that storage containers, bags, and the barrel located under the Facility Equipment and Materials Storage Building do not have the potential to contribute to runoff pollution – II.B.6.a.

15. For MCM #6, further investigate and determine whether the drop inlet in front of the fire department connects to the sanitary sewer, storm sewer, or combined sewer – II.B.6.a.

CORRECTIVE ACTIONS

1. For MCM #2, report participation through promotion, sponsorship, or other involvement, in a minimum of four local activities annually – II.B.2.b.
2. For MCM #3, create a prioritized schedule of field screening activities to detect and eliminate illicit discharges to the MS4 that include outfall monitoring – II.B.3.c(1)(a).
3. For MCM #3, report the HUC for each MS4 outfall listed in the outfall inventory table – II.B.3.a(1)(b).
4. For MCM #4, ensure that erosion and sediment control inspections occur per the schedule specified in 9VAC25-840-60 – II.B.4.c.
5. For MCM #4, ensure that erosion and sediment control practices at the Hopewell Regional Wastewater Treatment Plant are functioning properly and are compliant with the minimum standards of the Erosion and Sediment Control Regulations – II.B.4.c.
    a. Repair silt fences.
    b. Ensure that standing water is not leaking sediment into the wetland area at the far east end of the facility.
    c. Repair the dewatering bag that was observed to be actively leaking.
    d. Install temporary slope stabilization “upstream” of the silty discharge.
    e. Prevent any silty water from exiting the construction site and entering the adjacent waterway or wetland.
6. For MCM #4, report the total number of regulated land-disturbing activities, total number of acres disturbed, and total number of construction site inspections conducted annually – II.B.4.f(1-3).
7. For MCM #5, report the sixth order HUC and the correct latitude/longitude or address for each stormwater management facility in the Hopewell stormwater management facility tracking database – II.B.5.e(5).
8. For MCM #6, discontinue storage of street sweepings at the far northeast portion of the Public Works Facility without an adequate barrier to prevent contaminated runoff from entering the adjacent Poythress Run – II.B.6.a(2).
9. For MCM #6, improve general good housekeeping and pollution prevention practices at the City’s Public Works Facility – II.B.6.a(1-8).
    a. Clean up the oil stain located at the Fueling Area.
    b. Ensure that a complete spill kit is present at the Fueling Area.
    c. Remove and properly dispose of the yellow barrel with unknown liquid located near the Fire Drills Tower.
    d. Remove excess salt and sand from in front of the Salt Storage Building.
    e. Ensure that the storm sewer pipes transport runoff as intended. Unclog the storm inlet near the vehicle washing area and clean the surrounding area to ensure that it does not become re-clogged.